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ABSTRACT

This paper discusses the importance of considering individual learning styles when teaching college students. Today's college students represent a broad spectrum in terms of age, experience, culture, ethnicity, and level of preparedness, and it is a challenge for instructors to meet the needs of all students. There are five strands that affect learning (environmental, emotional, sociological, physiological, and processing styles). A review of research on learning styles suggests that there are significant gains over time and at all school levels when teaching focuses on individual learning styles. Contract Activity Packages (CAPs) are an innovative strategy that can address the different needs of today's students, providing flexibility that allows students and faculty to further explore their own interests while capitalizing on their learning style strengths. This paper describes what workshop session participants will be expected to understand (awareness of learning styles as a concept, ability to question the construction of their current syllabi, ability to gain new ideas regarding addressing students' diverse needs, and ability to obtain information on the specific benefits of CAPs). Methods for accomplishing the goals include a visual display with parts of a CAP illustrated, actual examples and hands-on examination of CAPs, manipulatives that reinforce various possibilities for successfully using CAPs, and reference materials on learning style research. (Contains 9 references.) (SM)

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Enriching Teaching Scholarship Through Learning Styles

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Enriching Teaching Scholarship Through Learning Styles

Section 1: Content

It was the third night of orientation week and there we were--facing 33 new freshman who seemed more interested in partying in the dorms than in attending another information session! But, as we moved through the evening, the students' interest gradually increased. Perhaps they realized that many of them had come to college without the necessary academic support skills to succeed in our traditionally lecture-oriented environment.

That night we began teaching the freshmen about their personal learning styles. We wanted to see if providing them with this knowledge would make a difference in their academic achievement and retention. Based on previous learning-style research with college populations, we believed it was important to teach college freshman and those of our colleagues who were interested about this concept. The students increasingly became involved as they realized that their personal struggles often were the result of not knowing how to study by capitalizing on their personal learning-style strengths and that we were providing them with information that might make a difference.

As word of our efforts spread, many of our colleagues approached us for information regarding learning styles. Faculty who were really interested in the teaching and learning process wanted to know how they could enrich their teaching scholarship in order to effectively reach more of their students.

While all did not immediately embrace the concept of learning styles, many were starting to question totally relying on lecture, and were beginning to recognize that today's colleges and universities are much different and more diverse than they used to be (Carducci, Elsasser, Lewthwaite, Pfleger-Dunham, 1992). Current college students represent a broad spectrum in terms of age, experience, culture, ethnicity, and level of preparedness. As a result, it has become a real challenge for classroom instructors to meet the needs of all students (Gardiner, 1992).

Learning is certainly not a simple process. Emphasis on issues such as student retention in higher education has strengthened interest in addressing students' diverse learning needs. Learning-style models have helped many faculty on our campus understand some of the most basic and observable individual student needs. The Dunn and Dunn Learning-Style Model is a good example of one that has repeatedly been validated by a large body of research and has steadily increased both in acceptance and application (Dunn, Griggs, Olson, Gorman & Beasley, 1995). We have focused on this model because it is the most comprehensive of the learning styles models; it examines 21 elements across 5 strands that affect learning.

Environmental elements such as light, sound, temperature, and seating design make up the first strand. The second strand considers emotionality--motivation, persistence, responsibility, and the need for external structure as opposed to being internally structured. The sociological strand considers whether students prefer to learn alone, in a pair, with peers, on a team, directly with a teacher, or in a variety of ways. The physiological strand considers perceptual preferences. Are students primarily auditory, visual, kinesthetic, or tactile learners? The fifth and final strand considers the

processing styles of global and analytic, hemisphericity, and whether students are impulsive or reflective.

Our experience has taught us that faculty want to know how to use this information to better facilitate their students' learning. This is important not only in the delivery instruction, but also in the processing of information and competency attainment. This strategy has been consistently successful at the elementary, secondary and college levels with impressive results using the Dunn and Dunn Learning-Style Model.

For example: Williams (1994-95) used the Productivity Environmental Preference Survey (Dunn, Dunn & Price, 1982) to identify the learning styles of college freshmen. PEPS is a comprehensive survey of adult learning styles. The students were informed of the results and given instructions with regard to learning-styles strategies. Shortly before finals, the students also received letters reminding them of the importance of paying attention to their own styles. Students who had received their style identification and training had significantly higher grade-point averages than those who had not.

Clark-Thayer (1987) trained tutors at a small urban college to identify poorly-achieving freshman students learning styles and teach them accordingly. The students' grades improved significantly.

At a large urban university, Dunn, Deckinger, Withers and Katzenstein (1990) identified the styles of marketing students and gave them specific homework prescriptions to match their particular learning styles--with the result being improved academic performance.

These are selected highlights from a large body of research. Indeed, a meta-analysis of 42 experimental studies conducted by 13 diverse institutions of higher education revealed consistently significant gains over time and at all school levels (Dunn, Griggs, Olson, Beasley & Gorman, 1995).

Current college populations are less homogeneous than they used to be--and so are their learning styles. Acknowledging these differences and addressing them to the extent we are able will better respond to the diversity that exists on every campus. How well does the course syllabus of which you are most proud address students diverse learning needs?

Through our classroom research with learning styles, we have found that Contract Activity Packages (CAPs) are an innovative instructional strategy that can speak to the different needs of today's student. A CAP provides incredible flexibility in that it allows students and faculty to further explore their own interests while capitalizing on their learning-style strengths. The CAP also demands that students actively participate in the learning process (Lewthwaite & Pfleger-Dunham, in print).

Contract Activity Packages can ideally be designed to work as an enhancement to the standard syllabus, which tends to offer a one-size-fits-all approach to completing course requirements; a CAP offers the student choice and individuation. It provides flexibility typically not found in course syllabi, while still providing the necessary course components that a syllabus addresses.

The following table demonstrates how CAPs include the important areas of a syllabus such as course objectives and methods of evaluation, yet also allow for accommodation of diverse learning styles:

TABLE
PARTS OF A CAP

ELEMENT	PURPOSE
Behavioral Objective	Describes the information or skills students are responsible for learning.
Activity Alternatives	Provide choice for demonstrating the accomplishment of each objective.
Reporting Alternatives	Identify how the Activity Alternative is shared with small groups.
Resource Alternatives	Provide different ways of learning the information cited in the objectives.
Small Group Techniques	Introduce or reinforce new and difficult information and allow for higher-level cognitive skill development.
Pre- and Posttest Assessments	Allow students to demonstrate mastery and to verify what has been learned.

(Source: Dunn & Dunn, 1993)

In addition to the aforementioned pedagogical benefits, the CAP is a winner in the evaluation category. Students demonstrate theoretical knowledge and competence via the difference between pre- and posttest scores. This is perfect for assessment purposes. Students also demonstrate performance-based attainment of skills and information via reporting alternatives.

We have had a great deal of success using contract activity packages with our students; not only do they address different learning styles, they can be used to solve myriad problems. Through our work with CAPs we have found additional benefits that CAPs can provide a in higher-education environment:

-Internships can be very effectively coordinated through the use of CAPs.
-CAPs provide alternatives to distance learning, while retaining the sense of independence that distance learning provides.
-CAPS allow for flexible start and end times-providing greater scheduling choices and just-in-time education.
-Adult learners are able to benefit from a self-paced alternative learning environment over which they have control.
-CAPS can be used to provide interesting and innovative faculty development alternatives.

Section II: Outcomes and Methods.

Participants in this poster session will :

*develop an awareness for learning styles as a concept they should at least consider;
*question the construct of their current syllabi;
*gain new ideas regarding addressing students' diverse learning needs;
*obtain information on specific benefits of CAPs.

Methods for accomplishing the above will be based on a learning styles approach that addresses multiple perceptual modalities and will include:

*a visual display with parts of a CAP illustrated;

*actual examples and hands-on examination of CAPs that have been used successfully with our students'

*manipulatives that reinforce the various possibilities for successfully utilizing CAPs;

*reference materials on learning-style research with the Dunn & Dunn model.

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